Section IV

The Port

Map 4.1 Port Facilities in Hampton Roads 49

Figure 4.1 East Coast Trade Volume Share by Weight 50

Figure 4.2 Hampton Roads Share of East Coast Shipping by Twenty Foot Equivalent Units 50

Figure 4.3 East Coast Trade Volume Share by Value 51

Figure 4.4 Hampton Roads Share of East Coast Foreign Trade by Value 51

Figure 4.5 Vessel Departures from Hampton Roads 52

Figure 4.6 General Cargo Volumes in Hampton Roads 52

Figure 4.7 Hampton Roads Twenty Foot Equivalent Units and World Trade Volumes 53

Figure 4.8 Coal Loadings in Hampton Roads 53

Figure 4.9 Hampton Roads Trade Lanes by Weight 54

Figure 4.10 Hampton Roads Trade Lanes by Value 54

Figure 4.11 Top Ten Exports Through Hampton Roads by Value 55

Figure 4.12 Top Ten Imports Through Hampton Roads by Value 55

Figure 4.13 Hampton Roads Employment in Transportation by Industry and Occupation 56

Figure 4.14 Mode of Transport for Freight Leaving the Port of Hampton Roads 56

The Port in Hampton Roads

The Port of Virginia serves as one of Hampton Roads' three basic sector industries that enable long-term economic growth. It does this by bringing money from around the country and all over the world into the region through handling cargo, and by showcasing this region to major companies and shippers across the globe.

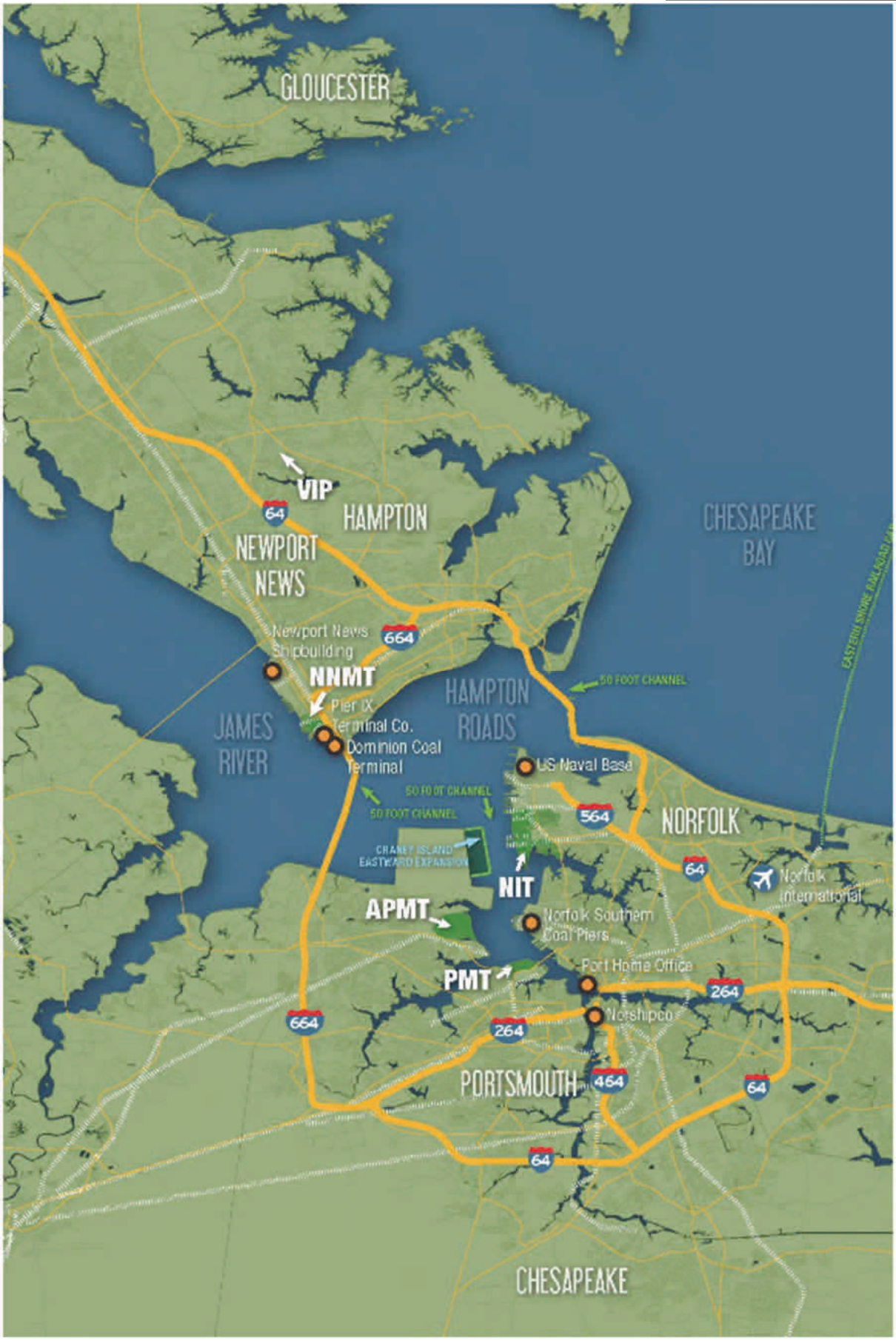
One of the main lenses that we see the port through is in a role of competing with other East Coast ports. Hampton Roads handled 16% of all East Coast foreign trade, by weight, in 2014, but only 11% of the value. While this competition does serve the valuable purpose of encouraging increased efficiency at the port, there are also very real elements of cooperation as major container ships stop at several East Coast ports as part of their trade route. Indeed, all East Coast ports work under the same contract with the longshoreman union.

The absolute levels of trade are a better area of focus when analyzing port statistics, because this is a better measure of the economic importance of this region, to the United States and the world. As trade grows, so will the importance of port regions.

Trade has grown rapidly, both through the region and throughout the world, as both natural and governmental barriers to trade have fallen. Technology has increased the level of trade, both by easing communication and by making shipping faster, more reliable, and less expensive. Also, while recent efforts have slowed, throughout the 80s and 90s, great advances to lower trade barriers and quotas went into effect across the globe. Even after the worst economic crisis since World War II, trade has recovered and continues to grow strongly. Total trade has increased more than 561% since 1973 and general cargo has now risen 7.2% above 2007 levels.

As one would expect from this region's proximity, Northern Europe continues to play an important role in this region's exports and imports, but Northeast Asia is also extremely important showing the impact of China, Korea, and others on world trade.

It is also important to note that although total trade has grown at high levels, the total number employed in the transportation industry or in transportation occupations has remained relatively static compared to the gains of trade. This indicates that the economic impact from trade in this region is not directly correlated with port traffic, but is instead predicated on a host of different industries that are enabled by the port.



Source: Virginia Maritime Association, The Ports of Virginia Annual 2014

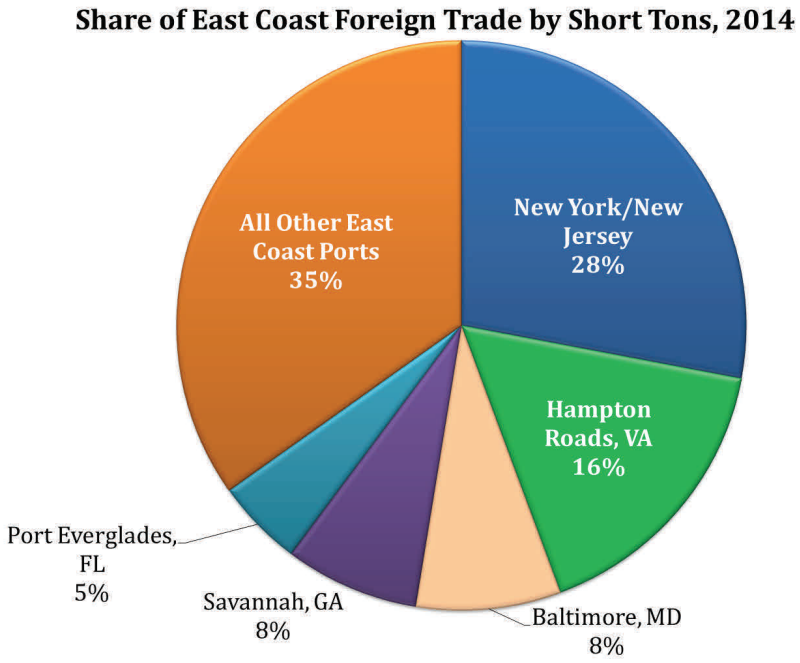
Figure 4.1 East Coast Trade Volume Share by Weight

Why is it important?

The Port of Hampton Roads serves a vital role in the region's economic engine. There is significant competition for port traffic on the East Coast, and this graphic shows how that trade is dispersed among East Coast ports by weight.

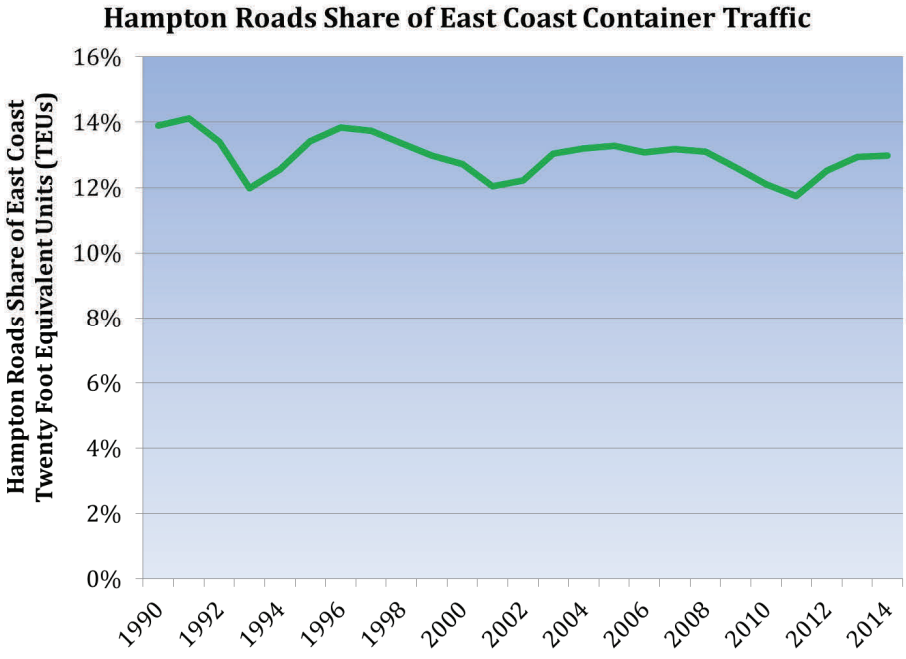
How are we doing?

Hampton Roads handled 24% of all East Coast foreign trade by weight. Hampton Roads' trade weight derives mainly from exports with coal accounting for a substantial proportion.



Source: American Association of Port Authorities, HRPDC

Figure 4.2 Hampton Roads Share of East Coast Shipping by Twenty Foot Equivalent Units



Source: Waterborne Commerce Statistics Center, U.S. Army Corp of Engineers, HRPDC

Why is it important?

Containerization is shipping freight in containers that easily transfer between trains, trucks, and ships. Since the first U.S. container ship in 1956, they have become the most important method of shipping goods and the industry standard for comparing ports.

How are we doing?

Hampton Roads' share of container traffic has been between 12% and 14% of East Coast traffic since 1990. Many factors impact container traffic at the port, including railway costs and regional demand.

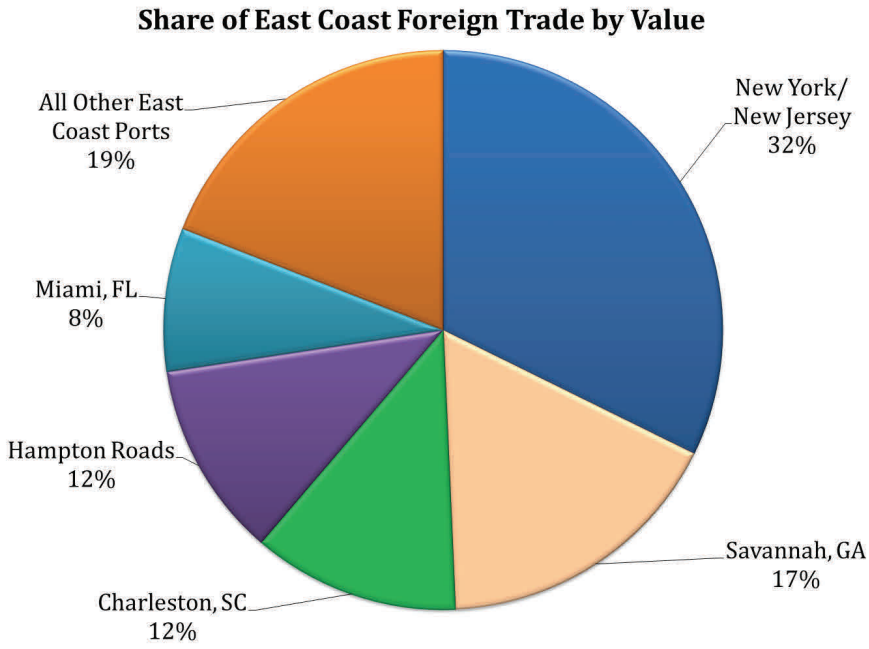
Figure 4.3 East Coast Trade Volume Share by Value

Why is it important?

Another way of measuring East Coast trade comes from measuring the value of trade at each port. This provides yet another perspective of the importance of trade to the local economy.

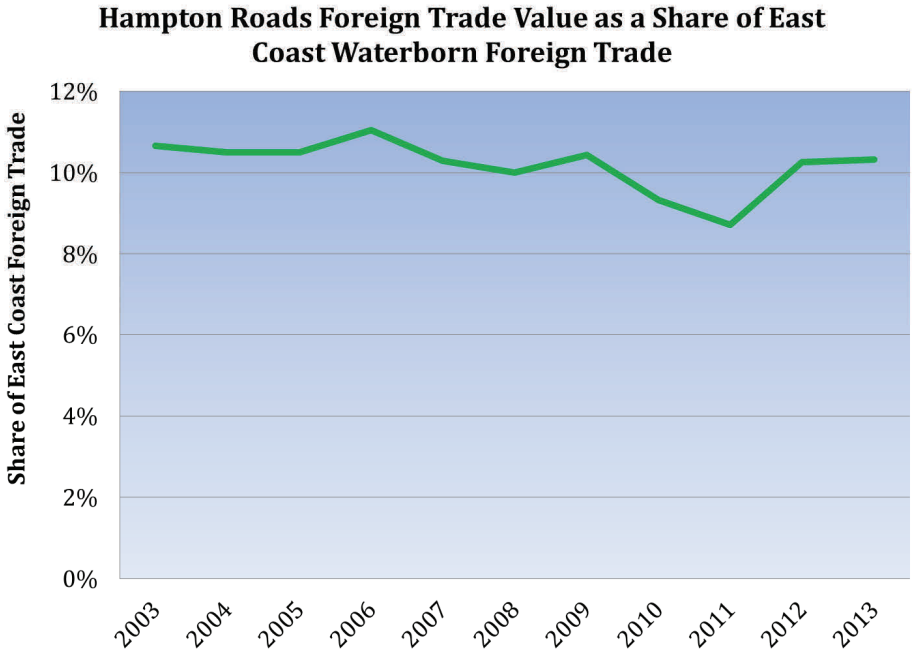
How are we doing?

Hampton Roads constitutes a lower share of East Coast trade measured by value. This results from the composition of the trade which passes through this region. Higher value goods, such as BMWs shipped through Charleston, would cause a port to have a higher share of traded value versus weight of cargo handled.



Source: American Association of Port Authorities, HRPDC

Figure 4.4 Hampton Roads Share of East Coast Foreign Trade by Value



Source: United States Maritime Administration, HRPDC

Why is it important?

This graphic illustrates the relative value of Hampton Roads trade versus the value of items traded through all East Coast ports.

How are we doing?

Over time the share of goods by value has trended down in Hampton Roads. The slight uptick in share after 2010 could be the result of the Heartland Corridor's completion and then recovering global trade in 2012.

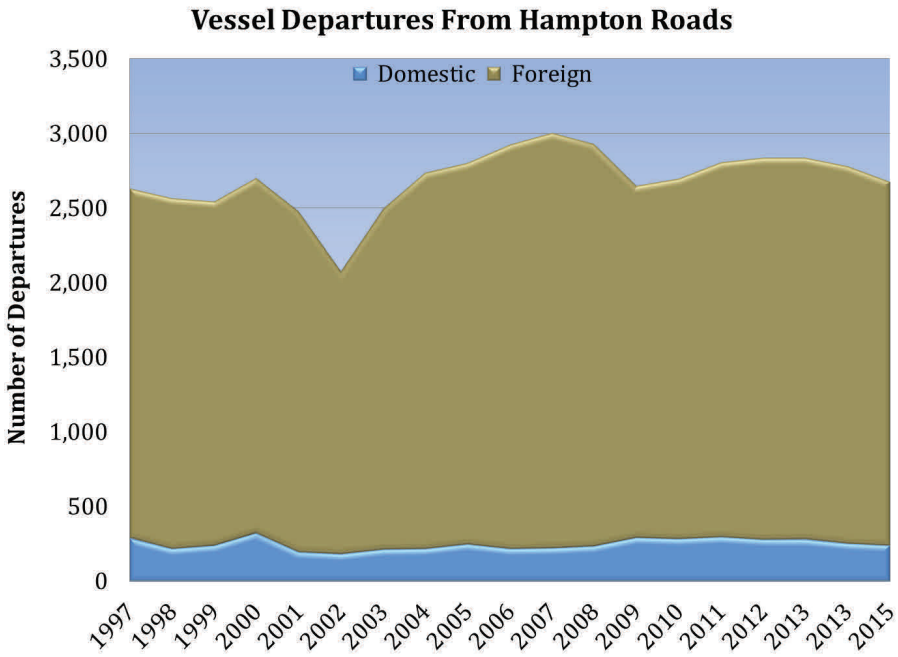
Figure 4.5 Vessel Departures from Hampton Roads

Why is it important?

One trend that helps to illuminate the demand for port services comes from the number of vessels that call on Hampton Roads in a particular year.

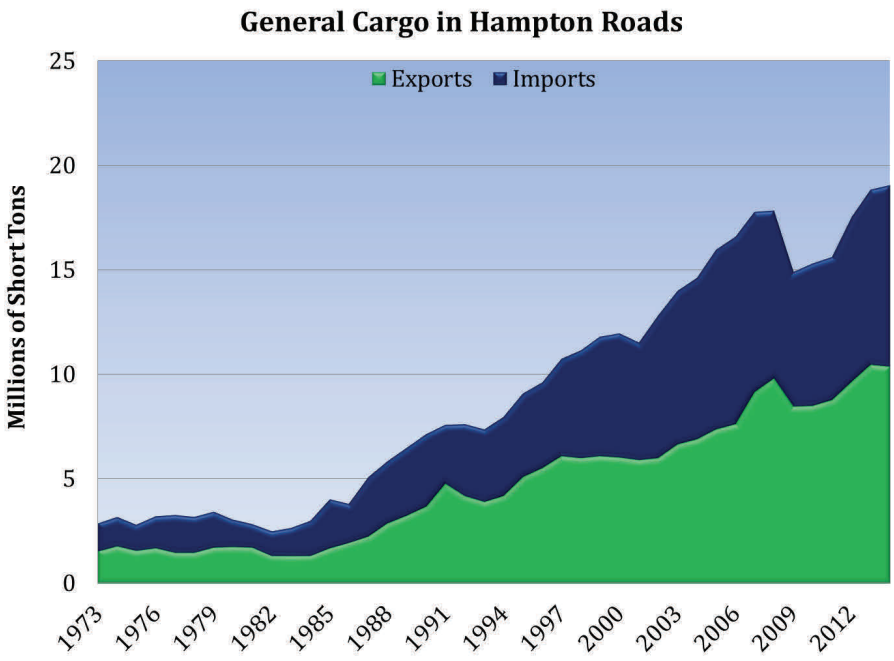
How are we doing?

The number of vessels moving through Hampton Roads is largely tied to the global demand for traded goods and services. One element that has served to weaken this as an indicator is the transition to ever larger sizes of container ships, so that even as trade increases, the number of vessels calling on Hampton Roads would not change to the same extent.



Source: Virginia Maritime Association, HRPDC

Figure 4.6 General Cargo Volumes in Hampton Roads



Source: Port of Virginia, HRPDC

Why is it important?

General cargo includes both containerized and break-bulk cargo. The ability to attract and manage general cargo measures the port's productivity and success as an economic engine.

How are we doing?

Trade through Hampton Roads increased by a large margin since the early 1980's, as trade barriers have fallen and communication technology has improved at facilitating commerce. While Hampton Roads' trade dropped precipitously during the great recession, it has recovered to an equal extent.

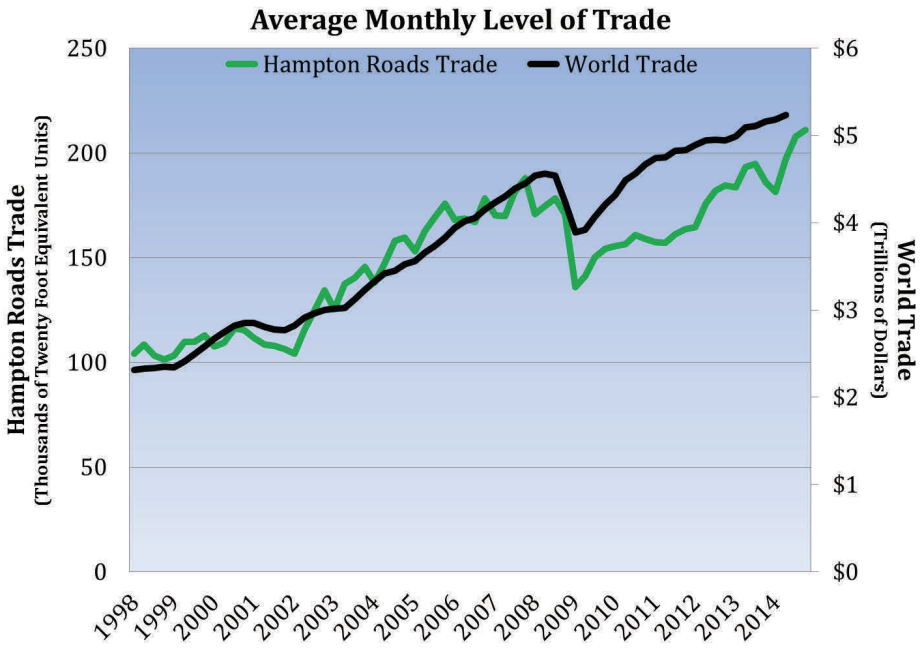
Figure 4.7 Hampton Roads Twenty Foot Equivalent Units and World Trade Volumes

Why is it important?

Containerized trade plays a significant role in world trade of goods, and with the exception of bulk commodities and vehicles (that roll on and off ships), it captures the majority of international trade.

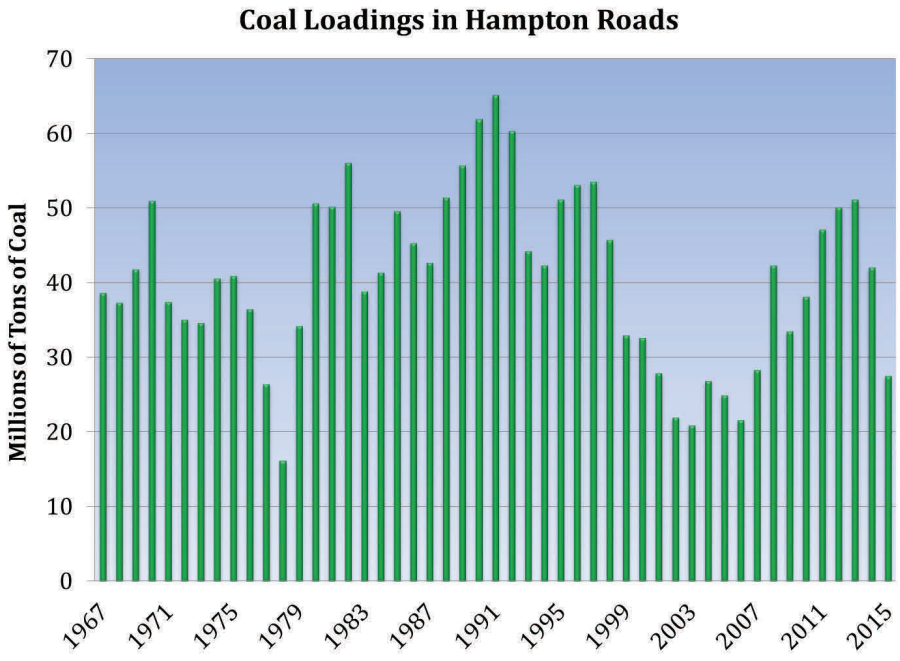
How are we doing?

Hampton Roads clearly follows the world trend in trade, and a significant portion of Hampton Roads' trade growth will likely occur in concert with growth in international trade.



Source: Port of Virginia, Organization for Economic Co-Operation and Development, HRPDC

Figure 4.8 Coal Loadings in Hampton Roads



Source: Virginia Maritime Association, HRPDC

Why is it important?

There are three coal piers in Hampton Roads, and the move to exporting coal helped to develop the railroad network in Hampton Roads. Coal still serves as a primary export of this region, as well as a major profit center for the two railroad companies that serve Hampton Roads.

How are we doing?

Coal exports depend on the state of the regional economy, the price of alternative sources of energy around the globe, and U.S. demand for coal. Coal exports have declined with the decrease in energy demands in the BRICs.

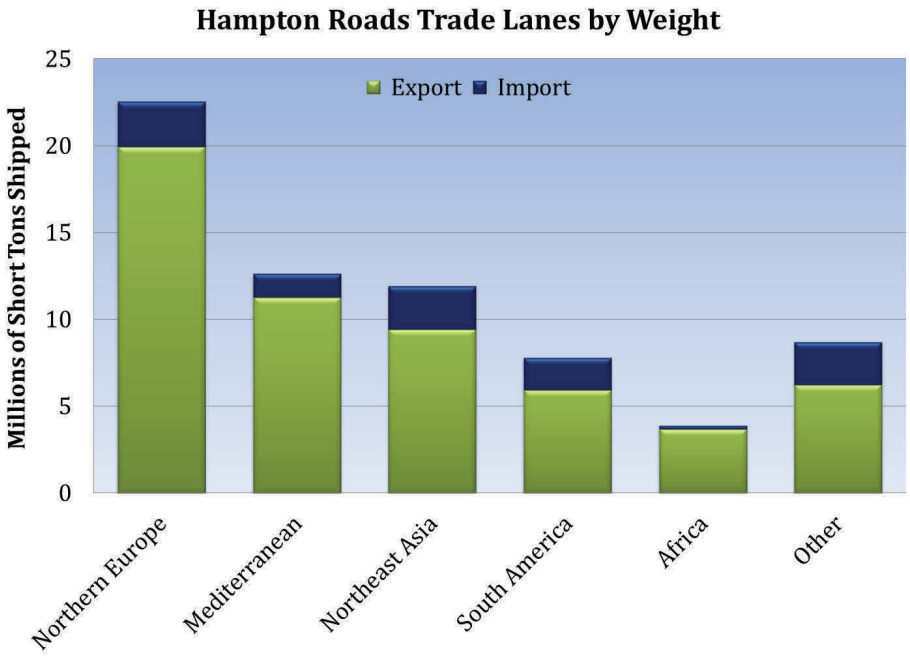
Figure 4.9 Hampton Roads Trade Lanes by Weight

Why is it important?

One interesting measure of the port is the source of imports and the destination of exports that flow through Hampton Roads. Measuring these flows by weight is one measure of the level of service provided to trading regions.

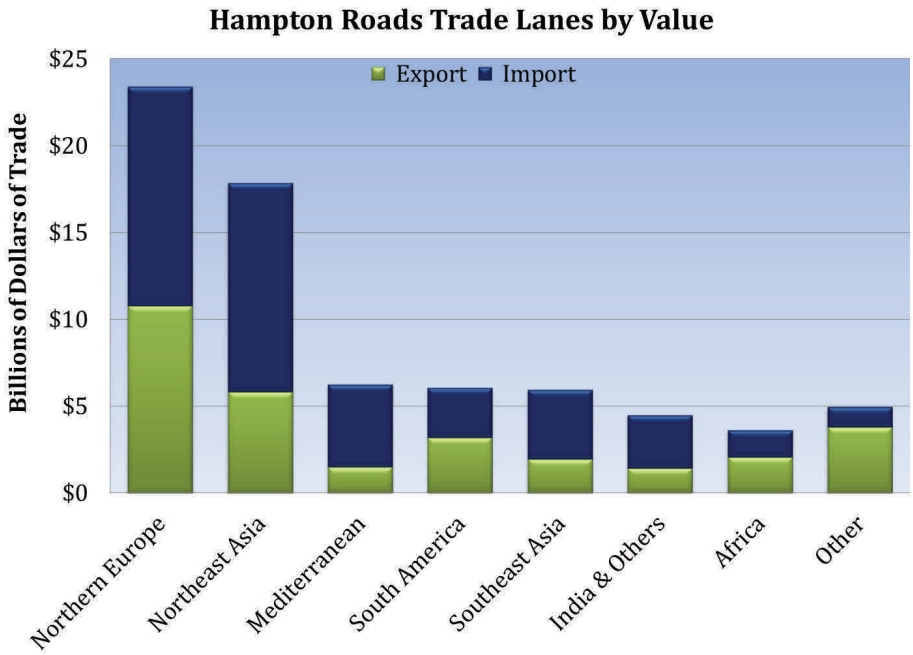
How are we doing?

Northern Europe and Northeast Asia see the highest percentage of trade by weight, and all of the region's trade lanes are dominated by exports, likely linked to the region's coal exports.



Source: Virginia Maritime Association, HRPDC

Figure 4.10 Hampton Roads Trade Lanes by Value



Source: Virginia Maritime Association, HRPDC

Why is it important?

One interesting measure of the port is the source of imports and the destination of exports that flow through Hampton Roads. Measuring these flows by value indicates the relative importance to the broader economy, and assesses the port's role as an economic engine.

How are we doing?

When measured by value, exports and imports play a more balanced role for Hampton Roads' trading partners. Northern Europe continues to play a major role as a partner trading through the Port of Hampton Roads.

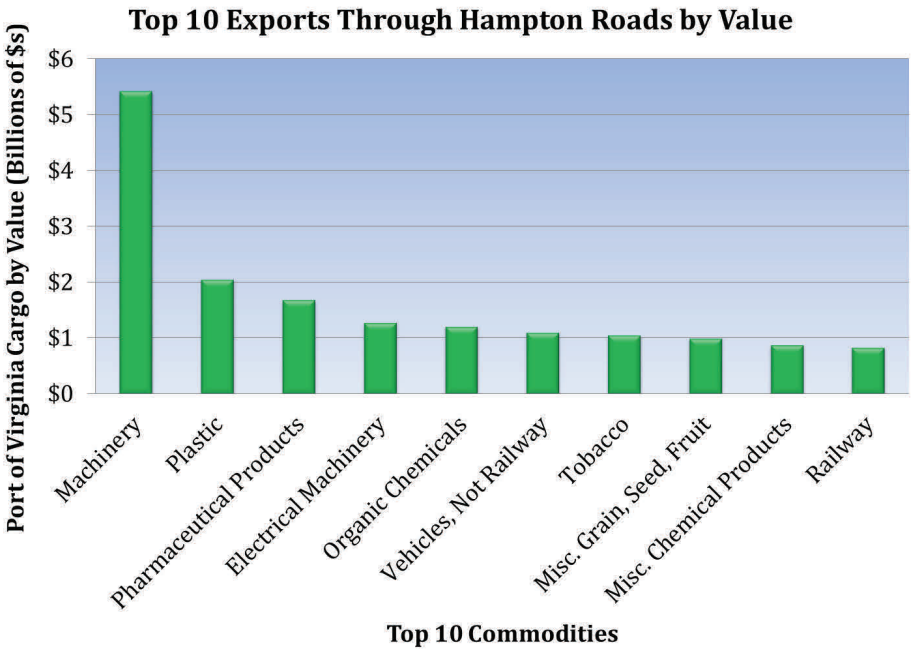
Figure 4.11 Top Ten Exports Through Hampton Roads by Value

Why is it important?

Another interesting measure is examining which goods are produced in the United States that are then shipped through Hampton Roads. In cases where these goods are not produced in Hampton Roads, these represent areas of possible economic development.

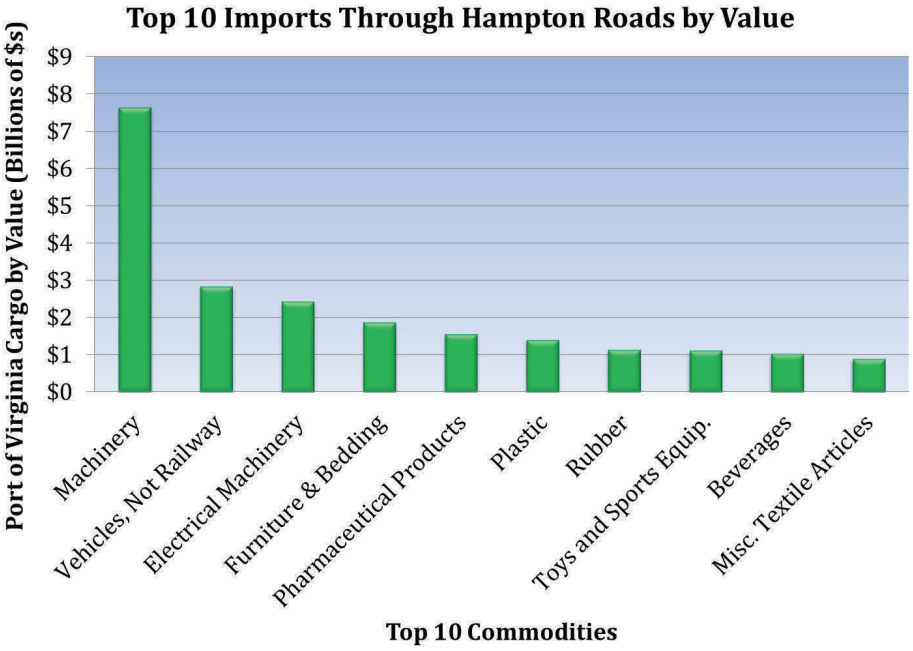
How are we doing?

Machinery is the most important commodity shipped through the Port of Hampton Roads by value, followed by plastic and pharmaceutical products.



Source: Virginia Maritime Association, HRPDC

Figure 4.12 Top Ten Imports Through Hampton Roads by Value



Why is it important?

Determining the most significant imports through the region by value also identifies potential overseas targets for economic development opportunities.

How are we doing?

Machinery is the primary import that moves through the port, as well as the primary export, when measured by value. Additionally, this region transports vehicles and electrical machinery.

Source: Virginia Maritime Association, HRPDC

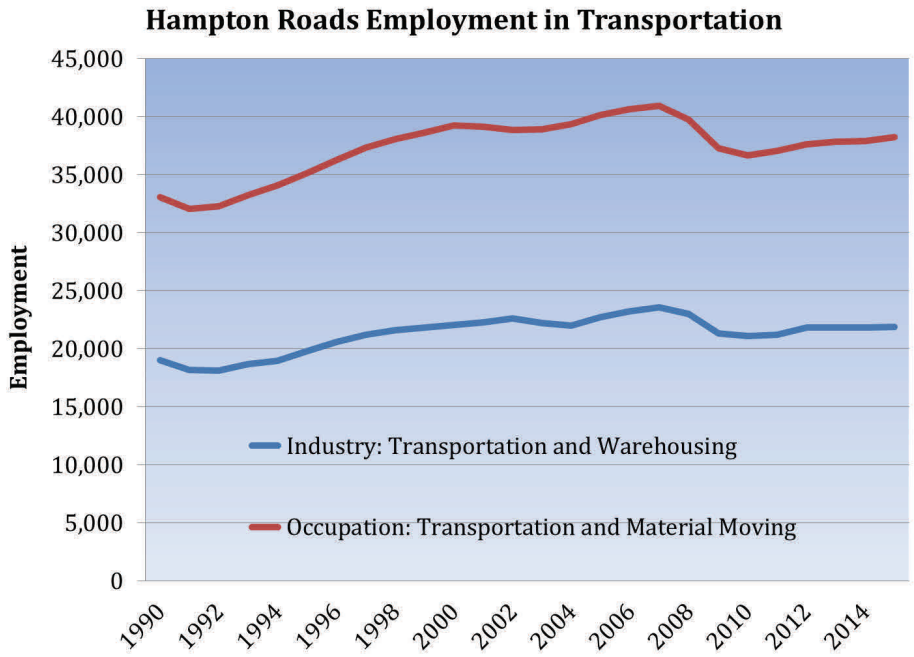
Figure 4.13 Hampton Roads Employment in Transportation by Industry and Occupation

Why is it important?

While many of the previous measures have focused on the cargo that moves through the port, another measure of the economic impact of the port is employment in the transportation industry, or examining the number of jobs in an occupation considered to be in transportation.

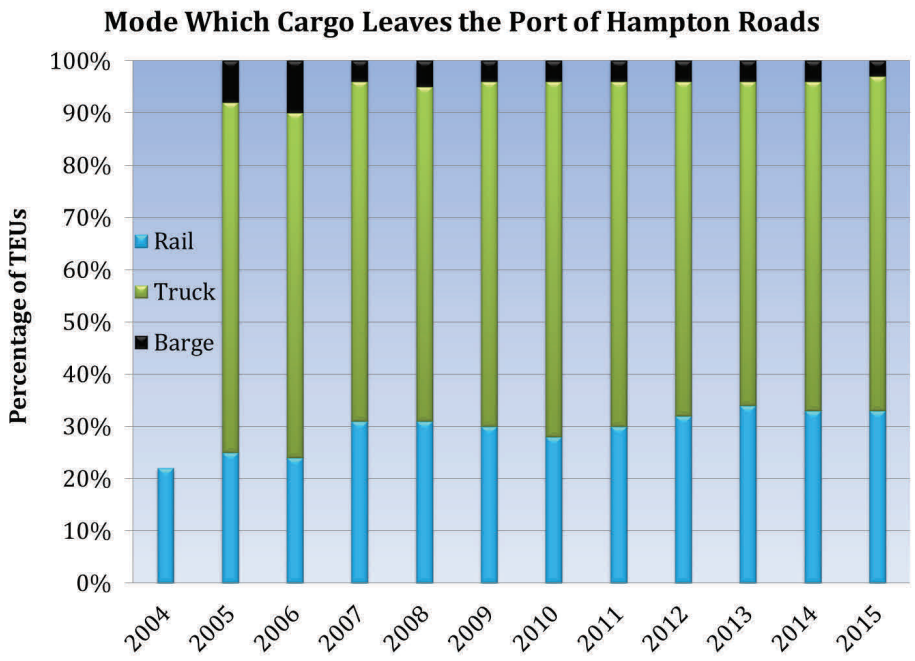
How are we doing?

Occupational employment in transportation is higher than industry employment, as many jobs that are derived from trade are not necessarily employed by a company in the trade industry.



Source: Regional Economic Modeling Inc., HRPDC

Figure 4.14 Mode of Transport for Freight Leaving the Port of Hampton Roads



Why is it important?

A measure of the impact of the port on the regional quality of life evaluates what percentage of cargo arriving at the port travels by truck versus by other transportation modes.

How are we doing?

Rail transportation has become increasingly important over the last few years. This derives partly from the opening of the Heartland Corridor and better rail links to local ports.

Source: Virginia Port Authority, HRPDC